

REMARKS

Reconsideration of the present application is requested. Claims 2, 6-7, 9-10, 13-14, 16, 19 and 25 have been canceled without prejudice or disclaimer. Claims 1 and 17 have been amended and are the independent claims.

DRAWINGS

The Examiner objects to the drawings under 37 C.F.R. §1.83(a) because a readout without a desired signal including image information is not performed before an exposure of the CCD camera when an external trigger pulse occurs at a point in time at which a readout of the CCD camera is to take place is allegedly not shown in the drawings. Although Applicants do not necessarily agree with the Examiner, Applicants have canceled claim 25 to further expedite prosecution of the present application. Withdrawal of this rejection is requested.

REJECTIONS UNDER 35 U.S.C. §112, First Paragraph

The Examiner rejects Claim 25 under 35 U.S.C. §112, First Paragraph as failing to comply with the written description and enablement requirements.

Although Applicants do not necessarily agree with the Examiner, Applicants have canceled claim 25 to further expedite prosecution of the present application. Withdrawal of this rejection is requested.

PRIOR ART REJECTIONS

The Examiner rejects Claims 1-3, 6 and 17-20 under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent Publication No. 2002/0186813 ("Tamura"). Claims 2, 6 and 19 have been canceled without prejudice or

disclaimer. With respect to claims 3, 17, 18 and 20, Applicants traverse this rejection.

Tamura discloses operations occurring in advance and periodically to remove dark signal images from a CCD storage device. Particularly, as shown in Fig. 23, during initialization, a refresh voltage is output to a capacitor at a time T1. At time T2, a predetermined time after time T1, the refresh signal is output to the capacitor and the charge accumulated on the capacitor is swept out at the time T3. Time T3 is also determined in advance to sufficiently reduce the dark current accumulation.

Tamura also uses an idle read process, occurring during the time interval extending from T3 through T5, to remove dark signal images from a CCD storage device. *See, e.g.*, para. [0023-0024]. The idle read process extends from the time period from T3 through T5, which is also determined in advance. The idle read process also allows sweeping out charges accumulated on the capacitor due to the above-discussed dark current accumulation. Both the refresh process and the idle read process occur during initialization and are repeated periodically.

In Tamura, any time an external trigger signal (i.e., a request signal) is received (*see, e.g.*, para. [0044-0045]), the refresh and idle read processes are immediately executed. However, Tamura does not teach or suggest any correlation between the request signal and whether or not a CCD readout does or does not take place. Absent any correlation between the request signal and CCD readout, Tamura clearly fails to teach or suggest at least, controlling

"triggering of a read out of the CCD camera without a desired signal including image information and a subsequent triggering of an exposure of the CCD camera when an external trigger pulse occurs at a point in time at which no readout of the CCD camera is to take place," as required by claim 1. For at least this reason, claim 1 distinguishes over Tamura.

The above notwithstanding, Tamura also fails to teach or suggest suppressing "a readout without a desired signal including image information," and triggering "exposure of the CCD camera," directly by the external trigger pulse, "if the time elapsed between a most recent reset pulse and an external trigger pulse is less than a duration of the readout of the CCD camera without a desired signal including image information," as required by claim 1. For at least this additional reason, claim 1 distinguishes over Tamura.

For at least these reasons, independent claim 1 is allowable over Tamura. Claim 17 is also allowable over Tamura for at least reasons somewhat similar to those set forth above with regard to claim 1.

REJECTIONS UNDER 35 U.S.C. §103

Claims 4 and 7-9 stand rejected under 35 U.S.C. §103(a) as unpatentable over Tamura and further in view of U.S. Patent No. 5,117,446 ("Haaker"); claims 5, 10, 11 and 13 stand rejected under U.S.C. §103(a) as allegedly unpatentable over Tamura in view of U.S. Patent No. 6,412,978 ("Watanabe") and U.S. Patent No. 5,175,754 ("Case"); claims 12 and 14-16 stand rejected under U.S.C. §103(a) as allegedly unpatentable over Tamura,

Haaker, Watanabe and Case. Applicants have canceled claims 7, 9-10, 13-14 and 16 without prejudice or disclaimer.

With respect to claims 4, 5, 8, 11, 12, 15 and 16, Applicants traverse this rejection in that even assuming the above-recited references could be combined as suggested by the Examiner (which Applicants do not admit), none of Haaker, Watanabe and/or Case, taken singly or in combination, make up for the above-discussed deficiencies of Tamura with respect to claims 1 or 17. Accordingly, claims 4, 5, 7-11.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-25 in connection with the present application is earnestly solicited.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a three (3) month extension of time for filing a reply to the outstanding Office Action and submit the required \$1,020.00 extension fee herewith.

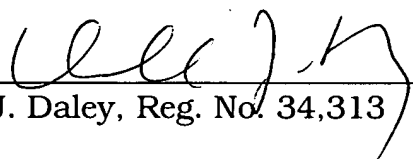
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Andrew M. Waxman at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By


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